

Title (en)  
FORMAL METHOD FOR CLOCK TREE ANALYSIS AND OPTIMIZATION

Title (de)  
FORMALES VERFAHREN ZUR TAKTBAUMANALYSE UND -OPTIMIERUNG

Title (fr)  
PROCÉDÉ FORMEL D'ANALYSE ARBORESCENTE ET D'OPTIMISATION D'HORLOGE

Publication  
**EP 3516554 A4 20200506 (EN)**

Application  
**EP 17853728 A 20170919**

Priority  
• US 201662397324 P 20160920  
• US 201715705784 A 20170915  
• US 2017052150 W 20170919

Abstract (en)  
[origin: US2018082004A1] Configuring a hardware verification system includes receiving first data representing a first integrated circuit design configured to operate via a first clock signal derived from a second clock signal and a third signal generated by the second clock signal. The computer transforms the first data into second data representing a second design that includes functionality of the first design. The transformation replaces the first clock signal with the second clock signal. A first Boolean function is defined by first and second values of the third signal corresponding to a first transition of the second clock signal being in a same direction as a transition of the first clock signal. A second Boolean function is defined by the first and second values of the third signal corresponding to a second transition of the second clock signal being in a direction opposite to the associated transition of the first clock signal.

IPC 8 full level  
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**G06F 30/331** (2020.01 - EP US); **G06F 30/3312** (2020.01 - US); **G06F 30/3323** (2020.01 - EP US); **G06F 30/34** (2020.01 - EP US); **G06F 30/347** (2020.01 - US); **G06F 30/396** (2020.01 - EP); **G06F 30/396** (2020.01 - US)

Citation (search report)  
• [A] US 7082582 B1 20060725 - BORKOVIC DRAZEN [US], et al  
• [A] US 6301553 B1 20011009 - BURGUN LUC M [FR], et al  
• [A] US 7424689 B1 20080909 - YUAN JINYONG [US]  
• [A] US 5452239 A 19950919 - DAI WEI-JIN [US], et al  
• See also references of WO 2018057481A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**US 10325046 B2 20190618**; **US 2018082004 A1 20180322**; CN 110383272 A 20191025; CN 110383272 B 20230915; EP 3516554 A1 20190731; EP 3516554 A4 20200506; WO 2018057481 A1 20180329

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**US 201715705784 A 20170915**; CN 201780071628 A 20170919; EP 17853728 A 20170919; US 2017052150 W 20170919